CWA COMPLIANCE SAMPLING INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Purpose:
Compliance Sampling Inspection

Facility:
R & S Farm
Ex. 6 (Personal Privacy)

NPDES Permit Number:
No NPDES Permit

Date of Inspection:
March 10, 2020

EPA Representatives:
Cheryl Burdett, CAFO Program Manager 312-886-1463
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Benjamin Atkinson, Agronomist 312-353-8243
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State Representatives:
Chris Lowell, IDEM
Matt Brown, IDEM

Facility Representatives:
Ex. 6 (Personal Privacy), Owner/Operator Ex. 6 (Personal Privacy)

Inspector Signature: _____

Approver Signature: _____

Approver Title: **Acting Chief, Water Enforcement and Compliance Assurance Branch, Section 2**

BACKGROUND

On March 10, 2020, at approximately 8:30 a.m., I arrived at R & S Farm in Wabash County, Indiana to conduct a Clean Water Act compliance inspection. I was joined by EPA inspector Ben Atkinson. We donned yellow rubber boots. Shortly after our arrival, inspectors from Indiana Department of Environmental Management (IDEM) arrived. We were met by Ex. 6 (Personal Privacy), Owner/Operator of R &S Farm to whom the EPA team presented their credentials. After presenting credentials to the Owner/Operator, the EPA team conducted their entry interview to explain the purpose for the inspection and EPA's authority to conduct inspections at Animal Feeding Operations. EPA's authority comes from Section 308 of the Clean Water Act. Ex. 6 (Personal Privacy) explained that he is a small operation with less than 300 cattle. I explained that we needed to conduct a walk-through of the facility to determine if there were significant areas of concern. The facility owner/operator stated that he probably will only have cattle for the next couple of months and does not plan to stay in business.

I explained that they had conducted overflights and had seen areas of concern that had the potential to discharge to waters of the United States. The owner/operator had stated that he was planning to transport heifers today and needed to be there at a certain time. I explained that they would need to conduct the walk-through at this time but could go through the checklist by phone at a later time. I explained that if a discharge was observed during the walk-through samples would need to be collected. I further explained that if samples were collected, EPA could collect split samples with R & S Farm. The owner/operator had stated that if samples were collected that the Facility would want split samples.

I stated that if, at any time, any of the information received or collected by EPA was construed as confidential business information (CBI) the Owner/Operator should let EPA know and they would identify it as CBI, and it would be handled as such. The Owner/Operator did not request any of the photos or information in the checklist to be marked as CBI.

SITE INSPECTION

Table 1: Site Entry and Opening Conference

Date/Arrival Time:	March 10, 2020.
Temperature:	47 degrees F.
Precipitation:	It had rained within the last 24 hours, but not during the inspection.
Presented credentials?	8:30 a.m.
Credentials presented to whom and at what time?	Ex. 6 (Personal Privacy), Owner/Operator.

The EPA team, IDEM, and the Owner/Operator started the walk-through of the production area at approximately 9:00 a.m. The walk-through started on the north side of R &S Farm.

We walked to the west on the north side of the facility toward the West Livestock Barn. On the north side of the West Livestock Barn, I observed an open pit attached to the west side of the West Livestock Barn overflowing into a crop field to the west (RIMG0002). I observed to the east of the West Livestock Barn on the north side of the East Livestock Barn used bedding and manure stocked outside of the barn and exposed to precipitation (RIMG0003).

We walked to the south side of the East Livestock Barn and I observed that the attached feedlot had manure and process wastewater flowing out of the feedlot and into the crop field to the east (RIMG0004). I also observed that the cows are fed outside the feedlot and the feed was exposed to precipitation. The stormwater that comes into contact with the feed and the manure within and outside the feedlot flows to the east into a crop field (RIMG0006). The runoff into the crop field flows to the southeast toward the roadside ditch. If it were to enter the roadside it would flow to the east through a culvert that flows under 1000 East to the south side of the road (RIMG0007 through RIMG0010).

We completed the walk-through of the north side and continued to the south side of R & S Farm. I observed the silage bunkers facing to the north on the south side of the facility (RIMG0011). Areas of the silage was exposed to precipitation and the leachate mixed with stormwater was flowing to the southwest. We continued to the east side of the silage bunkers to the Old Dairy Barn, which was partially collapsed, but still had heifers and steers within the barn (RIMG0012). The Old Dairy Barn had a concrete bottom pit attached to an open concrete area. The manure was observed flowing off the concrete and into the 1st stage waste storage structure (RIMG0013). I also observed that there was manure bypassing the 1st stage waste storage structure and flowing into the 2nd stage waste storage structure (RIMG0015).

Process wastewater was flowing to south along the west side of the blue silos. I observed an open manhole that was collecting the runoff (RIMG0016 and RIMG0017). The Owner/Operator stated that the manhole was collecting the runoff from the access road and process wastewater from the silage bunkers conveying the runoff through underground piping to a 10,000-gallon tank (RIMG0018). I asked the Owner/Operator what happens to the process wastewater and solids that are collected in the tank. He said the liquids are discharged out to the waste storage structures. I stated that we needed to walk-around the storage structures, but the Owner/Operator stated that the field was to muddy to walk through and that there was fence around the north side. I asked if we could go around the fence and the owner and operator stated that the fence ended on his neighbor's property. Mr. Atkinson stated that he could go under the fence on the R&S Farm and the Owner/Operator stated that it was okay to go under. Mr. Atkinson observed the following discharges on the south side of the fence during the inspection; overflow from the 2nd stage waste storage structure, discharge from the

10,000-gallon storage tank discharge pipe and a discharge from a field tile (RIMG0020 through RIMG0023). The discharges observed during the inspection flowed into Pony Creek at the time of the inspection (RIMG0024 through RIMG0028). The EPA team determined that samples needed to be collected to determine if pollutants were discharging into Pony Creek from these discharge points. I observed that there was an overflow from the 1st stage waste storage structure. The overflow from the 1st stage waste storage structure flowed into the crop field to the south. The EPA team followed the overflow through the crop field to the east toward Pony Creek. I observed that the overflow pooled prior to discharging into Pony Creek (RIMG0032 through RIMG0041). The EPA team, IDEM inspectors, and the Owner/Operator walked back to the cars to collect the equipment to conduct sampling. The EPA team at that time realized that they had locked their keys in the car. I explained to the Owner/Operator that we would need to wait for the locksmith and then would still need to collect samples, if the Owner/Operator had somewhere to go that we could collect the samples and be on our way. The Owner/Operator stated that he would wait and that he wanted to be there when we collected the samples. I recommended we take the time to go through the Region 5 CAFO Inspection Checklist.

The EPA team went through the Region 5 CAFO Inspection Checklist. We then waited for the locksmith, who came and unlocked the car door. The EPA team then prepared the sample bottles and went to collect the samples. The EPA team collected three samples along with the split samples (RIMG0049 through 50; RIMG0052 through RIMG0054; RIMG0062 and RIMG0063). Mr. Atkinson preserved all the samples and prepared the chain of custody which EPA provided to the Owner/Operator along with split samples.

After providing the Owner/Operator the samples and the chain of custody, I went through the exit briefing. I explained that after the results come back from the samples, I will complete the inspection report and provide a copy of the report to the Owner/Operator and to IDEM. The EPA team and IDEM inspectors exited the Facility at approximately 12:30 p.m.

The IDEM inspectors needed to collect samples upstream and downstream of the Facility. Mr. Atkinson took pictures of the upstream location, but due to holding times and laboratory times for the samples the EPA team did not have time to go with IDEM to the downstream location.

If photographs or documents were taken, does the facility consider any to be Confidential Business Information (CBI)?	No
Which information does the facility consider to be CBI?	No information was identified by the Owner/Operator as confidential business information at the time of the inspection.
EPA vehicle parked in an approved location.	Yes, according to the Owner/Operator.
Location where EPA vehicle was parked?	In the driveway west of the Owner/Operator's residence.
Disposable boots worn?	Yes.

Other bio-security measures taken (state vet contacted, etc.):	Prior to the inspection, I e-mailed Indiana's State Veterinarian to ask if there were any disease outbreaks for dairy or cattle in Wabash County, Indiana. I received confirmation from the Indiana's State Veterinarian that there were no outbreaks of cattle diseases in the area.

2.1 Records Review

Table 2: Documents

Checklist(s) Used
R5 CAFO Inspection Checklist
Facility Documents Reviewed:
Facility did not have an NMP.

Table 3: Facility Description

Type of Animal	**Number of Animals**	**Capacity**	**Type of Confinement**
East Livestock Barn	20 Heifers	Unknown.	Barn with open feedlot
West Livestock Barn	30 Heifers and Steer	Unknown.	Barn with open feedlot
Old Dairy Barn	22 Heifers/ Steer	Unknown.	Enclosed Barn
Pasture	17 beef cattle	Unknown.	Pasture
Minimum Number of Animals in previous 5 years:			At the time of the inspection, R & S Farm had approximately 77 heifers and steers on-site, not including the cattle on pasture. This is the minimum the site has had in the last five years.
Maximum Number of Animals in previous 5 years:			120 -130 milking and dry cows and some heifers.
Number of Animals that are stabled/confined and/or fed/maintained for 45 days or more in previous 12 months:			Currently, the facility has 22 heifers and had some steer.
Amount of Liquid Manure Generated per year:			Owner/Operator was not aware of how much liquid manure had been generated in a year.
Amount of Solid Manure Generated per year:			Owner/Operator was not aware of how much solid

	manure had been generated in a year.
Does the facility have an NPDES Permit?	No.
SIC or NAICS code:	0212.
CAFO Designation/Defined Date (If a designated CAFO)	Prior to the inspection, R & S Farm was not a CAFO. During the inspection, I observed process wastewater discharging from two areas from the production area. The 10,000-gallon storage discharge pipe and field tile merged and discharged into Pony Cree. I also observed the overflow from the 2nd stage waste storage structure discharging into Pony Creek.
Do animals have direct access to WOUS?	No, the animals are confined to barns and attached feedlots.
Are crops, vegetation, forage growth, or post-harvest residues sustained in the normal growing season over any portion of the lot or facility where animals are kept?	Some of the beef cattle are kept on a pasture.
What is the area (acres) of the production area?	Approximately 17 acres.
What is the area (acres) of the pasture?	32 acres for the pasture, part of the land is rented from the Owner/Operator's neighbor.
How many employees (not counting family members)?	0
Other facilities under common ownership (name and address): None.	

Table 4: Livestock Waste Storage

Type of Storage	Storage Capacity	Type of Liner	Depth Markers Present	Last Time Waste was Removed	Amount of Waste Removed	Days of Storage
1st stage waste storage structure	No information was provided at the time of the inspection.	Concrete bottom	None	No information was provided at the time of the inspection.	No information was provided at the time of the inspection.	No information was provided at the time of the inspection.
2nd stage waste storage structure	No information was provided at the time of the inspection.	Earthen	None	No information was provided at	No information was provided	No information was provided

				the time of the inspection.	at the time of the inspection.	at the time of the inspection.
Pit attached to the West Feedlot	No information was provided at the time of the inspection.	Concrete bottom	None	Last Fall.	As conditions area suitable for land application.	No information was provided at the time of the inspection.
10,000-gallon storage tank	10,000 gallons	No information was provided at the time of the inspection.	None	No information was provided at the time of the inspection.	No information was provided at the time of the inspection.	1-2 days of storage.
Total storage for all manure storage structures for the year:				No information was provided at the time of the inspection.		
Records at site of storage structure design?				The facility does not document or keep records.		
Is manure stored for the short term? If yes, describe where it is stored, how it is drained and where it drains to.				Yes. There is a pit on the west of the West Livestock Barn and a 10,000-gallon storage tank that is used to collect process wastewater but is designed to discharge through a pipe.		
Are records kept of the level of manure in the storage structures?				No.		
When was the last time a storage structure was emptied, either partially or completely?				Fall. The amount of manure and/or process wastewater was not recorded.		
What amount of manure or process wastewater was removed the last time the storage structure was emptied, either partially or completely?				The Owner/Operator was not able to provide this information during the inspection.		
Do the facility personnel inspect and keep records of all diversion devices?				No.		
Do the facility personnel inspect and keep records of all impoundments?				No.		
Do the facility personnel inspect and keep records of all the water lines?				No.		
Do the facility personnel perform routine visual inspections and keep records of the production area?				No inspections or records are kept.		
Does the waste storage system have a managed outfall or discharge point?				All storage structures were either overflowing or discharging, but they are not managed outfalls or overflows.		
Has the facility had any documented discharges of livestock waste to surface water in the past year?				No discharges have been recorded by the Owner/Operator.		

Are there safety devices installed around any manure storage ponds? (Barriers at the end of manure push off platforms, fences around pond, signage.)	Yes, there is a fence on the north side of the 1st and 2nd stage waste storage structures. Fence around the West Livestock Barn Feedlot.
Additional Information:	No, additional information was asked or provided by the Owner/Operator of R & S Farm.

Table 5: Livestock Waste Management

Describe the way manure is collected and disposed of at the facility:	
The manure in the pits and in the feedlots are scraped as needed and when ground is suitable. The manure in the 1st stage waste storage structure is collected and applied as needed and when ground is suitable.	
Describe the way used bedding is collected and disposed of at the facility:	
The facility scrapes the barns and land applies as necessary. .	
Are mortality records kept?	No records are kept
Describe the way mortalities are managed at the facility:	
Mortalities are composted.	
What type of method is used to provide drinking water for the animals?	Tanks are filled with water for the heifers and steers.
Describe the way spilled drinking water is collected and disposed of at the facility:	
Collected with the manure.	
Describe the way mist cooling water is collected and disposed of at the facility:	
None.	
Describe how chemicals are stored and how used or spilled chemicals are collected and disposed of at the facility:	
None.	
Describe the way water that has been used to wash/flush barns are collected and disposed of at the facility:	
The barns are manually scraped.	
Describe where water comes from that is used to clean and/or flush. (Wells, city, etc.)	
No water is used to clean the barns.	
Describe the way feed is contained and how runoff from feed is collected and disposed of at the facility:	

Leachate from open feed and silage bunkers are collected from the 10,000-gallon tank and process wastewater from the collection is discharged through the discharge pipe. The process wastewater from the discharge pipe discharges into Pony Creek.
If a dairy, describe how process wastewater from the plate cooler water is collected and disposed of at the facility:
Not applicable.
If a dairy, describe how process wastewater from the cleaning of the milking parlor is collected and disposed of at the facility:
Not applicable.
If a dairy, describe how process wastewater from the cleaning of the milk tanks is disposed of at the facility:
Not applicable.

If a dairy, how many times per day are cows milked?	Not applicable.

Table 6: Land Application and Disposal of Manure and Process Wastewater

Does the facility perform and keep records of the manure testing?	No.
When was the last time a sample was taken of the manure and/or process wastewater?	Not applicable.
Describe the process to take the manure and/or process wastewater sample.	Not applicable.
Number of acres available for land application:	Information was not collected on the number of acres available for land application.
Are land application records kept?	No land application records have been kept.
Who applies the manure and process wastewater to the fields?	Information was not collected on who is land applying the manure and process wastewater to the fields.
Are weather conditions at time of application kept? (24 before – 24 after)	No weather records are kept.
Does the facility perform and keep records of the soil testing?	This is being done by the Fertilizer Plant.
Is manure transferred off-site to another party?	No information was collected on whether manure was transferred to another party.
Are manure transfer records maintained?	No.

Do facility personnel perform periodic inspection of land application equipment?	No.

Table 7: Receiving Surface Waters

Describe the surface flow pathways:	
Discharges from the production area at R & S farm discharge into Pony Creek, a perennial waterway that flows into the Eel River, which flows to the Wabash River, a traditional navigable waterway.	
How many months out of the year is there flow in the nearest surface water pathway:	The National Hydrology Data identified Pony Creek as a Perennial Waterway.
Are there any storm water pathways entering the facility?	During the walk-around I did not observe stormwater pathways entering the production area.
Are there any clean water ponds on site?	No, there are no clean water ponds located on the production area of R & S Farm.
What is the name of the first waterway that is identified as a Traditional Navigable Water (TNW) for surface flow from the facility?	Wabash River.
Is the surface water pathway nearest to the facility considered to be ephemeral, intermittent or perennial?	Perennial.
Has the surface water pathway nearest to the facility been assessed for water quality?	The branch of Pony Creek by R&S Farm has not been assessed.

Table 8: Nutrient Management Plan

NMP on site?	R & S Farm was small facility and did not have a Nutrient Management Plan, so there was no information documented on how manure or fields were managed at the site.
Date NMP Submitted:	There was no information available during the inspection to review.
Planner Name/Company:	There was no information available during the inspection to review.
Date that the NMP was last updated:	There was no information available during the inspection to review.
Storage Description:	There was no information available during the inspection to review.
Amount of Manure Generated:	There was no information available during the inspection to review.
Capacity of Storage:	There was no information available during the inspection to review.

Duration of Storage:	There was no information available during the inspection to review.
Amount of Spreadable Land:	There was no information available during the inspection to review.
Mortality Management Plan:	There was no information available during the inspection to review.
Clean Water Diversion System:	There was no information available during the inspection to review.
Direct Contact Prevention Plan:	There was no information available during the inspection to review.
Chemical Management Plan:	There was no information available during the inspection to review.
Conservation Practices:	There was no information available during the inspection to review.
Manure Testing Protocols:	There was no information available during the inspection to review.
Soil Testing Protocols:	There was no information available during the inspection to review.
Land Application Protocols:	There was no information available during the inspection to review.
Additional NMP comments:	There was no information available during the inspection to review.
Does the NMP reflect the current operational characteristics?	Not applicable.
Are the number of acres owned/leased consistent with what is listed in the NMP?	Not applicable.

Table 9: Land Application Records (details of the records reviewed)

Fields available for application this year:	There was no information available during the inspection to review.
Timing limitation on fields:	There was no information available during the inspection to review.
Annual manure analysis for N and P	There was no information available during the inspection to review.
Soil tests for fields (for P) less than 5 years old?	There was no information available during the inspection to review.
Inspection of land application equipment documentation:	There was no information available during the inspection to review.
Crop:	There was no information available during the inspection to review.
Application Rate:	There was no information available during the inspection to review.

Crop Yield Goals:	There was no information available during the inspection to review.
Timing of land application:	There was no information available during the inspection to review.
Method of land application:	There was no information available during the inspection to review.
Additional land application information:	There was no information available during the inspection to review.

Table 10: Facility Records (details of the records reviewed)

Diversion devices:	There was no information available during the inspection to review.
Impoundments:	There was no information available during the inspection to review.
Depth marker observations:	There was no information available during the inspection to review.
Water Lines:	There was no information available during the inspection to review.
Mortality handling:	There was no information available during the inspection to review.
Storage Structure Design:	There was no information available during the inspection to review.
Overflow records:	There was no information available during the inspection to review.
Crop Yields:	There was no information available during the inspection to review.
Land Application Dates:	There was no information available during the inspection to review.
Weather Conditions at time of application (24 before-24 after):	There was no information available during the inspection to review.
Test Methods for Manure Testing:	There was no information available during the inspection to review.
Test Methods for Soil Testing:	There was no information available during the inspection to review.
Manure Test Results:	There was no information available during the inspection to review.
Soil Test Results:	There was no information available during the inspection to review.
Calculations of N and P applied:	There was no information available during the inspection to review.
Application Methods:	There was no information available during the inspection to review.
Application Equipment Inspection Dates:	There was no information available during the inspection to review.

Table 11: NPDES Permit

Type of permit (General, individual)	R & S Farm did not have a state or federal permit.
Is a copy of the permit on site?	NA.
Date that the permit was issued:	NA.
Date that the permit will expire:	NA.
Permitted number of animal units:	NA.
Does the permit contain a compliance schedule? If yes, provide a detailed description of the requirements and the status.	NA.
Have there been any changes made to the production area since the permit was issued? If yes, provide a detailed description.	NA.
Are there any practices in the permit that are not being done at the facility? (Records kept, inspections performed, etc.)	NA.

2.3 Closing Conference and Post-Inspection

The EPA team, IDEM, and the Operator/Owner walked back to the north side of R&S Farm, where the EPA team and IDEM parked their cars, and explained the areas of concern to the Owner/Operator, including:

1. Overflow from the West Livestock Barn open pit into crop field to the west.

2. Overflow from the open feedlot attached to the East Livestock Barn into the crop field to the east, which during precipitation event flows to the southeast into the roadside ditch on the north side of 1000 East. The flow in the dithc flows to the east to a culvert that conveys the flow to the south side of 1000 East.

3. Overflow from the 1st stage waste storage structure that flows through crop field to the south on the south side of the Facility and flows to the west toward Pony Creek.

4. Overflow from the 2nd stage waste storage structure was discharging into Pony Creek.

5. The 10-000-gallon collection tank was discharging through the discharge pipe into Pony Creek.

I explained that it will take approximately 70 days to get the inspection report which inlcudes the sampling results. I provided a business card with my contact information in case the Owner/Operator had any questions while waiting for the report.

Were specific Areas of Concern discussed with facility personnel?	Yes.
Who were the Areas of Concern discussed with? The Owner/Operator	
Exit Time:	12:30 p.m.
Disposable Boots Left at Facility?	Yes.
Vehicle Washed after leaving facility?	Yes.
Date vehicle was washed:	March 10, 2020.

Table 12: Sampling Information

Were samples taken?	Yes.
Were samples split with facility?	Yes.
Number of sample locations taken?	Three.
Was a trip blank created (done prior to entering the facility)?	Yes.
Identify which sample is the trip blank.	B01.
Were field duplicate samples taken (1 duplicate per 20 samples)?	No.
Identify which sample(s) is/are the field duplicate(s)	NA.
Were equipment blanks taken (if more than one type of equipment was used to collect samples)?	No.
Identify which samples were equipment blanks.	NA.
Location where samples were preserved:	R & S Farm
Name of people involved with sample preservation:	Ben Atkinson
Were samples sent to a lab?	Fecal Coliform samples were hand-delivered to Microbac Laboratory in Merrillville, Indiana on March 10, 2020. The nutrient and general chemistry samples were hand-delivered to Region 5, Analytical Services Branch Regional Laboratory on March 11th, 2020.
Name/Address of shipping location:	Not applicable.
Date the samples were dropped off at ASB in Chicago, Illinois.	March 11, 2020.

Did all inspectors involved with the sampling sign the chain of custody?	Yes.
Weather conditions at the time of sample collection:	Overcast.

Name of Laboratory where nutrients and general chemistry samples were taken:
Region 5, Analytical Services Branch located at 536 South Clark Street Chicago, Illinois.

Name of Laboratory where fecal coliform samples were taken:
Microbac Laboratory located at 250 West 84th Drive Merrillville, Indiana 46410.

Documents taken from the facility:
No documents were taken from R & S Farm.

Table 13: Facility Sample Information

Number	Name	Date	Time	Collector	Photo #	Photographer	Method of Collection	TKN mg/L	Total P mg/L	TDS mg/L	TSS mg/L	BOD-5-day mg/L	Ammonia as Nitrogen mg/L	Nitrate - Nitrite mg/L	*E. coli* CFU/ 100 mL
S01	Tile	3/10/2020	11:35 a.m.	Ben Atkinson	RIMG0052, RIMG0053, RIMG0054	Ben Atkinson	Grab	90.9	41.5	2260	78	1200	39.6	0.23	>2005
S02	Pond	3/10/2020	11:20 a.m.	Ben Atkinson	RIMG0049 RIMG0050	Ben Atkinson	Grab	32.6	8.3	796	27	30	20.2	0.64	530
S03	Concrete Tile	3/10/2020	11:48 a.m.	Ben Atkinson	RIMG0062 RIMG0063	Ben Atkinson	Grab	18.0	4.34	796	43	88	6.27	17.1	>2005
B01	R & S Farm	3/10/2020	Approximately 12:10 p.m.	Cheryl Burdett	No Photos	NA	Grab	U	U	U	U	U	U	U	No blank taken

TKN – total kjeldahl nitrogen (mg/L)
Total P– total phosphorus (mg/L)
TDS – total dissolved solids (mg/L)
TSS – total suspended solids (mg/L)
BOD 5-day – Biochemical Oxygen Demand 5 day
NA- Not applicable – no blank was done for *E.coli.*

List of Attachments:

A. Photo Log
B. Labeled Aerial Photo of R & S Farm
C. Sampling Results from Microbac Laboratory and Region 5 ASB Laboratory